

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

tion to the host, saying that they are first formed as the result of a mechanical stimulus, and that by means of a poisonous secretion they injure the tissue, draw nourishment from it, and as soon as this is obtained send out branches which for the most part do not penetrate the host directly, but spread over the surface surrounding the organ. Later Marshall Ward described their development, and speaks of them as being "of the same morphological nature as those figured by Brefeld in Peziza sclerotiorum, and explained by De Bary subsequently as organs of attachment," while J. E. Humphrey 5 describes them as compact cellular masses which cling closely to the surface with which they are in contact, but that their real significance is not yet understood. - MARGARETHA E. C. HORN, University of Michigan.

EXPLANATION OF PLATE XVII.

- Fig. 1. A branch of an upright hypha bearing conidia.
- Fig. 2. Young developing conidiophore with small projections at a, and mature conidia at b.
- Figs. 3-6. Successive stages of a developing organ of attachment.
- Fig. 7. A prostrate branch bearing mature conidia at a and a young organ of attachment at b.
- Fig. 8. Hypha entering a leaf of geranium through the stoma.
- Fig. 9. Germ tubes penetrating the host between the lamellæ of two adjacent cells.

NEW WEST VIRGINIA LICHENS.

Lecidea Virginiensis Calk. & Nyl., sp. nov.—Thallus glaucescens tenuis laevigatus rimulosus citrino-flavus; apothecia fusca aut nigra convexiuscula immarginata latit. circ. 0.5 mm, intus medio sordida; spora oblonga incoloris, long. 0.009-0.012, crass. 0.004-6^{mm}; epithecium et pars media hypothecii dilute fuscescens. In toto gelatina hymenialis coerulescens, dein theca vinose rubescens.

E stirpe videtur Lecidea sanguineo-atra, prope Lecideam delineatam Nyl.

On sandstone rock under the drip of a wet cliff. West Virginia, near Nuttallburg, L. W. Nuttall coll. no. 1779. Flora of West Virginia, Millsp. & Nutt., 181.

⁴Ann. Bot. 2: 327. 1888.

⁵ Ninth Ann. Rept. 1891 and Tenth Ann. Rept. 1892. Mass. Agr. Exp. Station.

Lecidea Nuttallii Calk. & Nyl., sp. nov.—Apothecia nigra parva; epithecium impressum; spora fusca oviformis 1-septata, long. 0.014–16, crass. 0.005–6^{mm}; hypothecium fuscum. In toto gelatina hymenialis vinose rubescens.

Super thallum *Ricasolia sublævis* Nyl. West Virginia, near Nuttallburg, L. W. Nuttall coll. no 1781. *Flora of West Virginia*, Millsp. & Nutt., 181.

Arthonia aleuromela Nyl., sp. nov.—Thallus albus subfarinaceus chrysogonidicus tenuissimus; apothecia subrotundata vel oblonga, prominula, latit. 0.4–0.5^{mm}; spora oblongo-oviformis parte inferiore attenuata, 1-septata, long. 0.010–11, crass. 0.003^{mm}. In toto gelatina hymenialis cœrulescens, dein obscurata.

Thallus detritus subaureus, CaCl vix reagens. Gonidia chroole-poidea fulvescentia.

On bark of *Quercus sp.* West Virginia, near Nuttallburg, alt. 2000 feet, L. W. Nuttall coll. no 1182. *Flora of West Virginia*, Millsp. and Nutt., 182.

Lecanora deplanans Nyl., sp. nov.—Thallus glauco-cinerascens tenuis areolato-rimosus determinatus; apothecia badio rufescens (satis diluta) innata subconcaviuscula, latit. 0.5–0.7^{mm}; spora ellipsoidea, long. 0.015–16, crass. 0.009–1.010^{mm}; epithecium inspersum. In toto gelatina hymenialis fulvo-rubescens.

Videtur species e stirpe Lecanora cervina, spermatiis ellipsoideis.

On rocks in bed of creek. West Virginia, Short Creek, alt. 1300 feet, L. W. Nuttall coll. no. 1126. Flora of West Virginia, Millsp. & Nutt. 178.—C. F. MILLSPAUGH, Field Columbian Museum, Chicago, and L. W. NUTTALL.